

SECTION 4. AIRCRAFT DISPATCHER INITIAL EQUIPMENT AND TRANSITION GROUND TRAINING CURRICULUM SEGMENTS

1093. GENERAL. This section contains direction and guidance to be used by inspectors when evaluating the content of aircraft dispatcher initial equipment and transition ground training curriculum segments. FAR 121.422 requires that initial and transition aircraft dispatcher ground training curriculum segments include instruction in at least the following: general dispatch subjects, aircraft characteristics, operations procedures, and emergency procedures.

A. *General Dispatch Subjects.* General dispatch subject areas must include the following:

- International weather reports (if applicable)
- Communications (must include the characteristics of the systems to be used and the appropriate normal and emergency procedures to be used)
- Meteorology (must include the various types of meteorological information and forecasts and interpretation of weather, including the forecasting of en route and terminal temperatures and other weather conditions; frontal systems; wind conditions; the use of actual and prognostic weather charts; and, when jet aircraft are involved, the inclusion of upper-air reports and forecasts, including turbulence)

NOTE: Weather interpretation and adverse conditions must be strongly emphasized in initial training.

- Adverse weather phenomena (must include clear air turbulence, windshear, and thunderstorms)
- NOTAM's
- Navigational charts and publications
- Joint dispatcher-pilot responsibilities
- Air traffic control (ATC) coordination procedures

- Familiarization with operation area
- Characteristics of special airports and other operationally significant airports which the operator uses (These characteristics may include terrain, approach aids, or prevailing weather phenomena.)

NOTE: The airports covered should include the airports in the area for which the aircraft dispatcher will be responsible after becoming qualified. The operator's emphasis should be on airports that create special problems for aircraft dispatchers in the operator's operations.

B. *Aircraft Characteristics.* The operator should provide both general training and aircraft-specific training when the aircraft dispatcher student is to be qualified on more than one type of aircraft. Training must be conducted on the general operating characteristics of the aircraft groups that the operator uses, such as turbojet or reciprocating aircraft. A description of each aircraft the aircraft dispatcher will be authorized to release is also required. This training must be *directly related* to aircraft dispatcher duties. The following areas should be emphasized in the operator's training program: aircraft operating and performance characteristics, navigation equipment, instrument approach and communications equipment, and emergency equipment. The operator must also provide training on the content and use of those portions of the flight manual applicable to aircraft dispatcher duties, such as MEL's, and abnormal and emergency procedures.

(1) Aircraft training must be tailored to aircraft dispatcher duties. It is not necessary for this training to contain the same degree of detail and emphasis on aircraft systems as exists in flightcrew training. POI's shall ensure that aircraft training is not conducted to the exclusion of other required training. For example, aircraft dispatchers should be taught that jet transport aircraft are equipped with constant speed drive (CSD) units; that CSD's are necessary for the proper functioning of the engine-driven generator; and that when a CSD is inoperative, the associated genera-

tor is also inoperative. Equipped with this knowledge, the aircraft dispatcher should be able to determine the correct action for an inoperative CSD by referring to the minimum equipment list (MEL). Aircraft dispatchers are not required to have detailed training on aircraft systems to comprehend this information.

(2) Operators may choose to conduct initial equipment training on one type of aircraft or to include all aircraft the operator operates in an initial new-hire curriculum. When the operator chooses to limit initial new-hire aircraft training to one specific type of aircraft, the aircraft dispatcher must be qualified on additional types of aircraft by means of transition training.

(3) FAR 121.418 requires that operators conduct differences training when the air carrier has aircraft variances within the same type of aircraft. This training should focus on the differences which affect aircraft dispatcher duties, such as operating characteristics, performance limitations, or MEL's.

C. Operations Procedures. Operators must provide training in the specific operations the aircraft dispatcher must perform and training relative to each type of aircraft the aircraft dispatcher is authorized to release. Operators must provide aircraft dispatchers with specific training in the following procedures:

- Operations under adverse weather phenomena conditions (must include clear air turbulence, windshear, and thunderstorms)
- Weight and balance computations and load control procedures
- Aircraft performance computations, to include takeoff weight limitations based on departure runway, arrival runway, and en route limitations, and also engine-out limitations
- Flight-planning procedures, to include route selection, flight time, and fuel requirements analysis
- Dispatch release preparation
- Crew briefings

- Flight monitoring procedures
- Flightcrew response to various emergency situations, including the assistance the aircraft dispatcher can provide in each situation
- MEL and CDL procedures
- Manual performance of all required procedures in case of the loss of automated capabilities
- Training in appropriate geographic areas
- ATC and instrument procedures, to include ground hold and central flow control procedures
- Radio/telephone procedures

D. Emergency Procedures. Operators must provide training to aircraft dispatchers in the procedures the dispatcher is to follow in case of an emergency. This training must cover actions taken to aid the flightcrew and to notify the company, government, and private agencies.

1095. AREAS OF EMPHASIS. Operators should emphasize specific areas for each category of training in the aircraft dispatcher ground training curriculum segment.

A. Initial New-Hire Training. In the initial new-hire category of training, operators must provide thorough training in each subject area. The operator must ensure that each aircraft dispatcher student has mastered each skill required to perform adequately on the job. In addition to the academic or classroom training, aircraft dispatchers are usually required to complete on-the-job training (OJT) to become proficient in the required aircraft dispatcher skills. Although the FAR's do not require OJT, it is an effective method the operator can use to develop a new-hire aircraft dispatcher's skills in the finer points of aircraft dispatcher duties and responsibilities. Furthermore, it is one of the best training methods for qualifying aircraft dispatchers to the standard of performance required on competency checks.

B. Initial Equipment Training. Operators must conduct initial equipment training when a currently qualified aircraft dispatcher is qualifying to dispatch an aircraft of a different group, such as turbojet, turbopropeller, or reciprocating.

The operator should emphasize two areas in this training: the operating characteristics of the new aircraft and the new considerations an aircraft dispatcher should make as a result of the new aircraft. For example, when aircraft dispatchers are first learning to dispatch turbojet aircraft, training will be required in high altitude meteorology, clear air turbulence awareness, the tropopause, and jetstreams.

C. Transition Training. Operators must conduct transition training to qualify an aircraft dispatcher in a new type of aircraft of the same group. The aircraft dispatcher must be fully qualified as a dispatcher on an aircraft of the same group to be eligible for training in the transition category. Since qualified dispatchers may be assumed to possess a general familiarity with the characteristics of airplanes of the same group, the ground training curriculum segment consists almost exclusively of aircraft-specific training on the new aircraft.

1097. EVALUATION OF TRAINING HOURS.

A. Initial New-Hire and Initial Equipment Ground Training Hours. FAR 121.422(c) specifies that the minimum programmed hours of instruction required for the aircraft dispatcher initial-new hire and initial-equipment ground training curriculum segments are as follows:

- Group I reciprocating airplanes - 30 hours
- Group I turbopropeller airplanes - 40 hours
- Group II turbojet airplanes - 40 hours

B. Transition Training Hours. Programmed hours for transition training are not specified in the FAR's. The number of hours required for transition training varies widely depending on the similarity of the aircraft types involved and the experience of the aircraft dispatcher. With similar aircraft types, transition training may not have to be extensive. When differences between aircraft types are great, more extensive training is required.

C. Determining General Ground Training Hours. POI's must consider the complexity of both the operation and

Par. 1097

the aircraft when evaluating an operator's general ground training curriculum outline. Training for a complex type of operation may require more than the 40-hour minimum regulatory requirement. The proposed program hours should initially be at least the 40 hours specified in Part 121. Usually the required training can only be accomplished in the minimum 40 hours specified by regulation for simple operations of one or two types of aircraft. When complex operations and several different airplane types are involved, more hours are usually required. The actual required training hours can only be determined in the final approval process by the inspector's observing and assessing the effectiveness of the training provided. Reductions to the programmed hours are appropriate when the operator demonstrates that the training provided is sufficient.

1099. EVALUATION OF AN AIRCRAFT DISPATCHER GENERAL GROUND TRAINING CURRICULUM SEGMENT OUTLINE FOR INITIAL APPROVAL. POI's must determine whether an operator's proposed general ground training modules contain the information and training on skills required for aircraft dispatchers to become fully proficient in aircraft dispatcher duties and responsibilities. Inspectors should use the job aid in this section when evaluating the operator's proposed curriculum segment outline (see figure 3.5.4.1.).

A. Aircraft Dispatcher Ground Training Segment Job Aid. This job aid (figure 3.5.4.1.), is provided for guidance only and must not be construed to be an outline of mandatory rules or regulatory requirements. The job aid is intended to assist inspectors during the evaluation of individual aircraft dispatcher ground training curriculum segment modules for both initial and final approval.

B. Use of Job Aid. When using the job aid, inspectors should make a side-by-side comparison of the operator's proposal. The job aid is organized with training subjects listed in the left column and evaluation criteria or remarks listed across the top. Inspectors may use the spaces within the matrix for notes, comments, dates, or checkmarks. There are also blank columns and rows in each job aid for inspectors to indicate additional training modules or evaluation criteria.

1100. - 1110. RESERVED

FIGURE 3.5.4.1.

AIRCRAFT DISPATCHER GROUND TRAINING SEGMENT JOB AID

TRAINING SUBJECTS	EVALUATION CRITERIA				
	Adequacy of Element/Events	Adequacy of Courseware	Training Aids and Facilities		
GENERAL DISPATCH Communications					
Meteorology Reports & Forecast					
Weather Interpret. Winds and Temperature					
Terminal & Frontal Weather					
International Weather					
Upper Air Reports and Prog. Charts					
Adverse Weather					
NOTAM System					
Navigational Publications					
Flight Planning					
Organized Track Systems and Procedures					
Joint Pilot - Dispatcher Responsibility					
Dispatch Release Preparation					
Forecasting Terminal Temperatures					
Radio Telephone Procedures					

FIGURE 3.5.4.1. (Cont'd.)

AIRCRAFT DISPATCHER GROUND TRAINING SEGMENT JOB AID

TRAINING SUBJECTS	EVALUATION CRITERIA				
	Adequacy of Elements/ Events	Adequacy of Courseware	Training Aids and Facilities		
Geographic Area					
Manual Flight Planning					
PIC Briefing					
Flight-Following					
Airports, Terrain Aids, Approaches					
Prevailing Weather Phenomena					
AIRCRAFT General Characteristics					
Description of Each Type					
Operating & Performance Characteristics					
Navigation and Communication Equipment and Cap.					
Emergency Equipment					
Use of Flight Manual					
Differences					

FIGURE 3.5.4.1. (Cont'd.)**AIRCRAFT DISPATCHER GROUND TRAINING SEGMENT JOB AID**

TRAINING SUBJECTS	EVALUATION CRITERIA				
	Adequacy of Elements/Events	Adequacy of Courseware	Training Aids and Facilities		
PROCEDURES					
Weight and Balance					
Takeoff Performance Limits and Calculations					
En Route Performance Limits and Calculations					
Destination Limits and Calculations					
Flight Planning Tracks, Fuel, Alternates					
MEL and CDL					
ATC and Flow Control					
Release Preparation					
Flight Monitoring					
Redispatch In Flight					
Emergency Procedures and Notification					
Special Airports					

[PAGES 3-567 THROUGH 3-572 RESERVED]